

WHAT IS CLAIMED IS:

1. A cylinder head system, comprising:

a first surface adapted to be attached to a rocker box;

an intake system;

wherein the cylinder head defines a duct system extending from the first surface to the intake system.
2. A cylinder head system according to claim 1, wherein the duct system has a first portion extending to the first surface, a third portion extending to a line leading to the intake system, and a second portion connecting the first portion and the third portion.
3. A cylinder head system according to claim 2, wherein the intake system comprises an intake manifold mounted to a side of the cylinder head, and wherein the line leads to the intake manifold.
4. A cylinder head system according to claim 1, wherein the duct system is under a pressure differential to draw gases through the duct system to the intake system.
5. A cylinder head system according to claim 1, further comprising a vacuum source in fluid communication with the intake system drawing gases through the duct system to the intake system.
6. A cylinder head system according to claim 1, wherein the duct system is entirely internal to the cylinder head.
7. A cylinder head system according to claim 1, wherein the cylinder head defines an intake port as a portion of the intake system and wherein the duct system defines a passage from the first surface to the intake port.

8. A cylinder head, comprising:

a cylinder head body having a top surface and a side portion, wherein the side portion defines an intake port;

wherein the cylinder head body defines a straight duct from the top surface to the intake port, and wherein the duct extends at an oblique angle relative to the top surface.

9. A cylinder head according to claim 8, wherein the duct is entirely internal to the cylinder head.

10. A cylinder head according to claim 8, wherein the cylinder head is under vacuum to draw gases through the duct to the intake port.

11. A cylinder head according to claim 8, further comprising a vacuum source drawing gases through the duct to the intake port.

12. A method of removing blow-by gases in an internal combustion engine, comprising:

forming a duct system in a cylinder head from a rocker box engagement surface to an intake portion;

providing a vacuum source in fluid communication with the intake portion;

drawing blow-by gases through the duct to the intake portion.

13. A method according to claim 12, wherein the duct system has a first portion extending to the rocker box engagement surface, a second portion extending to a line leading to the intake portion, and a third portion connecting the first portion and the second portion.

14. A method according to claim 13, wherein the intake portion comprises an intake manifold mounted to a side of the cylinder head, and wherein the line leads to the intake manifold.

15. A method according to claim 12, wherein the cylinder head defines an intake port as the intake portion and wherein the duct system defines a passage from the rocker box engagement surface to the intake port.

16. A cylinder head, comprising:

a cylinder head body having a top surface and a side portion, wherein the side portion defines an intake port;

wherein the cylinder head body defines a straight duct at an oblique angle relative to the top surface, and wherein the duct extends from the top surface to the intake port.

17. An internal combustion engine, comprising:

a crankcase;

a cylinder mounting to the crankcase;

a cylinder head mounted to the cylinder and a rocker box mounting surface;

a rocker box mounted to the rocker box mounting surface of the cylinder head;

an intake system;

wherein the cylinder head defines a duct system extending from the rocker box mounting surface to the intake system.

18. An engine according to claim 17, wherein the duct system has a first portion extending to the rocker box mounting surface, a second portion extending to a line leading to the intake system, and a third portion connecting the first portion and the second portion.

19. An engine according to claim 18, wherein the intake system comprises an intake manifold mounted to a side of the cylinder head, and wherein the line leads to the intake manifold.

20. An engine according to claim 17, wherein the duct system is under a pressure differential to draw gases through the duct system to the intake system.
21. An engine according to claim 17, further comprising a vacuum source in fluid communication with the intake system drawing gases through the duct system to the intake system.
22. An engine according to claim 17, wherein the duct system is entirely internal to the cylinder head.
23. An engine according to claim 17, wherein the cylinder head defines an intake port as a portion of the intake system and wherein the duct system defines a passage from the rocker box engagement surface to the intake port.